



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

September 24, 2013

Ms. Margaret Kirkpatrick
NW Natural Gas Co.
220 NW 2nd Avenue
Portland, Oregon 97209

Dear Ms. Kirkpatrick:

The purpose of this letter is to ensure the Lower Willamette Group and the EPA have a common understanding of the process for the revisions to and finalization of the remedial investigation (RI) report for the Portland Harbor Superfund Site and to document our agreed upon process.

Specifically, this letter provides an update to the letters I sent to you on April 1, 2013 and May 17, 2013, that described the review process for the second draft of the RI report. Since that time, representatives of the Lower Willamette Group and the EPA have discussed and agreed to several changes to the earlier proposals. This process is the same as provided to you on May 17, 2013, with two additions as noted in my email to you dated June 24, 2013, and our agreement at our August 28, 2013 meeting that no further changes are necessary. For ease of review, the changes since the May 17, 2013 letter are underlined.

The process for the EPA modification and comment and LWG dispute resolution on the second draft RI report is as follows:

For each section of the RI report, the EPA will make modifications and if needed additional comments to the text and provide comments on figures, tables, and related Appendices needing revision by the LWG. The EPA will provide each chapter to the LWG as it completes its review, modifications, and comments rather than hold all revisions until the EPA is done with the review of the entire RI report.

The EPA Project Managers, in coordination with the LWG Project Managers, maintain a working schedule to determine staffing and whether the project is keeping on track. The EPA Project Managers will notify LWG Project Managers of schedule modifications 7 calendar days in advance to ensure that parties are aware of changes to EPA's schedule for submitting revised chapters to the LWG, and the LWG schedule will be extended as well to provide a 30 calendar days to review and comment resolution period on each chapter of the RI. The RI schedule will be modified by the EPA to accommodate the schedule changes previously described and to add time if necessary to account for informal issue resolution to the senior managers or formal dispute resolution, as described below. This working schedule targets our agreed upon completion date for the RI in Spring 2014.

The LWG will have up to 30 calendar days to review each chapter and identify any errors or other issues on EPA's modifications and comments and resolve both the LWG's issues and EPA's comments with the EPA through an enhanced informal dispute process. Additional time for informal resolution of sections may be authorized by the EPA Project Managers if it is determined to be warranted based on the progress being made to resolve outstanding issues.

The EPA and LWG staff will meet at least once per section to discuss the LWG comments during the informal resolution period. If resolution of issues important to the LWG is not reached at the staff/project management level on each section, LWG can elevate those issues to senior management (both LWG and EPA) for resolution no later than, but preferably before the end of the 30-day review period.

The EPA and LWG agree that this process is an enhanced informal dispute resolution process to try to resolve issues quickly and not require formal dispute resolution per Section XVI of the AOC. If the Project Managers from the LWG and the EPA do not agree on an issue or issues, senior managers will attempt to reach resolution in 14 working days. In this instance, the LWG will provide a written statement of the disputed matter(s) to the EPA within 3 working days and the EPA will respond in writing within 3 working days, unless an extended timeframe is agreed to by the senior managers. The LWG and the EPA senior managers will meet to discuss the disputed matter(s) and endeavor to resolve them within the 14-day period unless an extended timeframe is agreed to. If there is resolution of the disputed matter(s), it will be documented in writing. The final redraft of the relevant RI section will incorporate the resolution consistent with the written resolution; if there is no resolution of the disputed matter(s), the LWG may invoke formal dispute on the issue(s) during the formal dispute process defined in the next paragraph.

The EPA and LWG will further agree that the time period to raise formal dispute to the ECL Office Director as provided in Section XVIII, Paragraph 1 of the AOC will be extended until 30 calendar days after all the EPA modifications and comments on all chapters of the RI Report have been provided to the LWG and the enhanced informal process has been conducted, if needed, on all chapters. The EPA and LWG agree that the 30-day period to raise a formal dispute will be triggered upon the EPA sending a letter with direction to incorporate all modifications and comments provided on the RI report, as modified by any changes agreed to between the Project Managers or informal dispute resolution agreements by senior managers. The letter transmitting the final changes required will supersede the comment letters sent by the EPA on the RI Report.

The formal dispute resolution process on any remaining issues will follow the formal dispute resolution process in the AOC Section XVIII, Paragraph 1. The LWG further agrees that no new issues regarding EPA comments on the RI will be raised in formal dispute that were not raised during the enhanced informal dispute process. The LWG may, however, invoke formal dispute on any new comments or changes, if any, contained in EPA's letter transmitting the final changes. The final LWG review will verify that all issues resolved on a section by section basis are reflected and are consistently applied throughout the document, and will include a quality assurance review of the document.

The due date for the LWG to provide a revised draft final RI Report will be 30 calendar days after receipt of the EPA letter described above. Per Section XVIII, Paragraph 2, the LWG will proceed to incorporate and revise all sections and chapters of the RI Report that is not subject to formal dispute. It is EPA's expectation that the LWG will be incorporating our modifications and working on addressing all of EPA's comments as they receive them, particularly, changes to tables, figures and Appendices, so we do not expect there will be a need for an extension beyond the 30-day timeframe for a draft Final RI Report, which is expected to be delivered in electronic format only. If the LWG provides any early version of any sections incorporating EPA's comments prior to the scheduled date for the EPA to provide its Section 10 comments to the LWG, the EPA will review and provide comments back to the LWG prior to sending the final letter directing incorporation of EPA's comments (as modified) to ensure that EPA's comments have been adequately incorporated into the final document.

If the EPA or the LWG determine that this process is not facilitating the revision of the RI report in a more timely way than if the EPA were to provide all its modifications and comments at once at the end of its review, this issue will be raised to the senior management group for discussion. The EPA will then make a determination as to how to proceed in order to complete the work required under the terms of the AOC.

I believe this captured our agreements, and request written confirmation from the LWG that the process and extensions of time for informal and formal dispute on EPA's modifications and comments are acceptable, and that modification to the AOC is not required for implementation of this enhanced review process.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Cohen", written in dark ink.

Lori Cohen, Associate Director
Office of Environmental Cleanup

Enclosure

cc: Mr. Tom Imeson
Mr. Jack Isselmann
Mr. Doug Loutzenhiser
Mr. Dean Marriott

Cohen, Lori

From: Cohen, Lori
Sent: Monday, June 24, 2013 10:16 AM
To: 'Kirkpatrick, Margaret'; (dean.marriott@portlandoregon.gov); (doug.loutzenhiser@total.com); (jack.isselmann@gbrx.com); Tom Imeson (tom.imeson@portofportland.com)
Subject: Portland Harbor - RI review process

Greetings LWG managers:

In preparing for our meeting this Wednesday, I realized that I have not provided a response to an email dated May 28, 2013 from Jennifer Woronets on behalf of the LWG. As you may recall, her email responded to my email dated May 17, 2013 to Margaret Kirkpatrick which provided the near final version of our agreed upon RI process.

The LWG requested two revisions to the text in the RI review process, specifically:

1. Replace "The letter transmitting the final changes required will supersede the comment letters sent by the EPA during this informal review process." with "The letter transmitting the final changes required will supersede the comment letters sent by the EPA on the RI Report."
2. Replace "The LWG and the EPA will further agree that no new issues may be raised in formal dispute that were not raised during the enhanced informal dispute process;" with "The LWG and the EPA will further agree that no new issues may be raised in formal dispute or in EPA's letter transmitting the final changes that were not raised during the enhanced informal dispute process;".

EPA concurs with the first change in item #1 suggested above.

As for item #2; I suggest we replace this sentence: "The LWG and the EPA will further agree that no new issues may be raised in formal dispute that were not raised during the enhanced informal dispute process." With **"The LWG further agrees that no new issues regarding EPA comments on the RI will be raised in formal dispute that were not raised during the enhanced informal dispute process. The LWG may, however, invoke formal dispute on any new comments or changes, if any, contained in EPA's letter transmitting the final changes.**

If needed, we can discuss at the meeting. I look forward to seeing you on Wednesday.
Lori

Cohen, Lori

From: Cohen, Lori
Sent: Friday, May 17, 2013 3:33 PM
To: 'Kirkpatrick, Margaret'
Cc: (jworonets@anchorqea.com)
Subject: PH RI process
Attachments: Margaret Kirkpatrick Ltr_Lori Cohen 5.17.13.pdf; Kirkpatrick_Lori Cohen 5.17.13.docx

Hi Margaret,

Attached is the letter regarding the updated RI review process and updated schedule. I believe this is a good path forward for the project- I hope the LWG team will agree.

Some important changes have been made to the process based on LWG comments. A few notable changes: 1) no overlapping review periods for the LWG except for the BERA; 2) EPA has agreed to 7 day notification to the LWG is our schedule may be delayed and made it clear that the LWG schedule will be modified accordingly; 3) clear process for agreed upon modification to supersede EPA's initial comments; 4) allowing for LWG 30 calendar days to formally dispute the final EPA directed changes, 4) other changes for clarity.

Please distribute as appropriate. I look forward to your response.

Lori



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MAY 17 2013

Ms. Margaret Kirkpatrick
NW Natural Gas Co.
220 NW 2nd Ave
Portland, Oregon 97209

Dear Ms. Kirkpatrick:

The purpose of this letter is to ensure the Lower Willamette Group and the EPA have a common understanding of the process for the revisions to and finalization of the remedial investigation (RI) report for the Portland Harbor Superfund Site. Per our recent discussions, the review process is well underway and appears to be going well.

Specifically, this letter provides an update to the letter I sent to you on April 1, 2013, that described the review process for the second draft of the RI report. Since that time, representatives of the Lower Willamette Group and the EPA have discussed and agreed to several changes to the April 1 proposal. This letter also addresses LWG comments raised in its two emails to me dated April 29, 2013 on this topic (one from Jennifer Woronets and one from you).

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For each section of the RI report, the EPA will make modifications and if needed additional comments to the text and provide comments on figures, tables, and related Appendices needing revision by the LWG. The EPA will provide each chapter to the LWG as it completes its review, modifications and comments rather than hold all revisions until the EPA is done with the review of the entire RI report.

Enclosed is an updated working schedule that will be used by Project Managers to determine staffing and whether the project is keeping on track. The EPA Project Managers will notify LWG Project Managers of schedule modifications 7 calendar days in advance to ensure that parties are aware of changes to EPA's schedule for submitting revised chapters to the LWG, and the LWG schedule will be extended as well to provide a 30 calendar days to review and comment resolution period on each chapter of the RI. The RI schedule will be modified by the EPA to accommodate the schedule changes previously described and to add time if necessary to account for informal issue resolution to the senior managers or formal dispute resolution, as described below. This working schedule targets our agreed upon completion date for the RI in Spring 2014.

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I believe this captures our agreements, and request written confirmation from the LWG that the process and extensions of time for informal and formal dispute on EPA's modifications and comments are acceptable, and that modification to the AOC is not required for implementation of this enhanced review process.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lori Cohen", with a stylized, flowing script.

Lori Cohen, Associate Director
Office of Environmental Cleanup

Enclosure
Schedule dated 5-15-13

Portland Harbor Project Schedule

Disclaimer: This schedule is a working schedule meant for Project Managers to keep project on schedule. Dates regarding duration of EPA review are informational only and the submittal dates to LWG are targets only and subject to change. Per the AOC, LWG has 30 days to review comments submitted by EPA.

Complete RI

Task	Subtask	Lead ¹	Duration (days)	Start	End	Submitted to LWG	LWG Review
Section 1	Introduction					11/30/2012	2/12/2013
	Edit text	Koch					
	Redline	Koch					
	Edit Maps	Koch					
Section 2	Study Area Investigation					11/30/2012	2/12/2013
	Edit text	Koch					
	Peer review	Keeley					
	Edit tables, maps, & Figures	Koch					
Appendix A	Data Sources and Site Characterization/Risk Assessment Database					11/30/2012	2/12/2013
	Review Text	Koch					
Appendix H	Merge w/ Appendix A	Koch				11/30/2012	2/12/2013
Section 3	Environmental Setting						
	Edit text	Cora/Koch				2/26/2013	4/26/2013
	Edit tables, maps, & Figures	Koch					
Section 4	Identification of Sources						
	Edit text	Cora/Koch				3/20/2013	4/26/2013
	Edit tables, maps, & Figures	Koch					
Appendix C							
Section 5	Extent of Contamination						
	Edit text	Koch				7/16/2013	8/16/2013
	Edit tables, maps, & Figures	Koch					
Appendix D							
Appendix H							
Section 6	Contaminant Fate & Transport						
	Edit text	Koch				8/18/2013	9/17/2013
	Edit tables, maps, & Figures	Koch					
Appendix E							
Section 7	Determination of Background						
	Edit text	Koch/Allen				6/14/2013	7/14/2013
	Edit tables, maps, & Figures						
Section 8	BHHRA						
	Edit text	Allen/Koch					
	Edit tables, maps, & Figures	Allen/Koch					
Appendix F	BHHRA	Allen/LWG					
Section 9	BERA						
	Edit text	Shephard/Koch				6/3/2013	7/3/2013
	Edit tables, maps, & Figures	Shephard/Koch					
Appendix G	BERA	LWG/Shephard					
Section 10	Summary & Conclusions						
	Edit text	Koch/Cora				10/1/2013	10/31/2013
	Edit tables, maps, & Figures	Koch/CDM					
Appendix I							
Section 11	References						
	Edit text	Koch				10/1/2013	10/31/2013
Executive Summary		LWG?	14	10/31/2013	11/14/2013		
EPA Review of Exec Summary		Koch/Cora	7	11/14/2013	11/21/2013		
EPA Letter Directing incorporation of comments		Koch	1	11/22/2013	11/22/2013		
Dispute Clock		LWG	30	11/22/2013	12/22/2013		
Integral Finalize Document (Electronic Version)		LWG/Integral	25	11/22/2013	12/17/2013		
Final LWG Approval		LWG	9	12/17/2013	12/26/2013		
EPA Review			30	12/26/2013	1/25/2014		
LWG Finalize (Full Production Version)		LWG/Integral	30	1/25/2014	2/24/2014		

Note 1: Additional appropriate technical and legal reviewers may also review various chapters.

Yellow highlighted cells indicates an actual date while unhighlighted cells indicate projected dates.



Chairperson: Bob Wyatt, NW Natural

Treasurer: Frederick Wolf, DBA, Legacy Site Services for Arkema

August 29, 2014

Kristine Koch
U.S. Environmental Protection Agency, Region 10
1200 Sixth Avenue, Suite 900, M/S ECL-115
Seattle, Washington 98101-3140

Re: LWG Unresolved Comments on RI Sections 5 and 10 (Lower Willamette River, Portland Harbor Superfund Site, USEPA Docket No: CERCLA-10-2001-0240)

Dear Ms. Koch:

EPA provided the LWG its proposed revisions to Section 5 of the LWG's August 29, 2011 Draft Final Remedial Investigation Report on June 11, 2014. EPA provided its proposed revisions to Section 10 of the Draft Final RI on July 29, 2014, along with a cover letter indicating that the informal resolution process for both RI Section 5 and Section 10 would end August 29, 2014.

EPA and the LWG have met to discuss EPA's revisions to Sections 5 and 10 of the LWG's draft final RI. Although EPA and the LWG have reached agreement on some issues, significant issues remain unresolved, particularly with respect to EPA's deletion of major elements of the LWG's conceptual site model for Portland Harbor. As we have previously communicated to EPA, Integral has advised the LWG that these deletions constitute such significant technical errors and deviations from EPA guidance that Integral will not identify itself as an author of the RI Report as currently revised by EPA. The LWG also will not identify itself as an author of EPA's current version of the report, because, taken as a whole, and especially in light of EPA's revisions to Section 10, the RI no longer reflects the LWG's understanding of how physical, biological, and chemical conditions in Portland Harbor interact with human activities and ecological receptors and does not provide a foundation for assessment of a reasonable set of cleanup alternatives in the FS.

Pursuant to the September 24, 2013 RI Process Agreement, the LWG is elevating the unresolved issues in Sections 5 and 10 to EPA and LWG senior managers for resolution. Enclosed with this letter please find the LWG's comments on unresolved issues in Sections 5 and 10, together with marked up drafts of EPA's proposed revisions to Sections 5 and 10 identifying the material we believe needs to be retained in those sections. The marked up drafts (and a table of other resolved issues related to Section 5) also memorialize agreements the LWG was able to reach with EPA during the informal negotiation period.

If EPA believes it would be productive for the senior managers to meet to discuss these issues, the LWG senior managers are prepared to meet with EPA within 14 working days of this letter. A discussion of RI Sections 5 and 10 could perhaps be added to the agenda for the meeting tentatively planned for September 15, 2014. If not, we will await EPA's final letter directing the LWG to incorporate EPA modifications and comments on all sections of the RI Report, as contemplated in the RI Process Agreement. In either event, we want to assure EPA that, at the end of the process described under the RI Process Agreement, the LWG intends to honor its obligation under the Consent Order, and we will instruct Integral to incorporate EPA's changes into the RI Report and produce a final report for EPA in the manner directed by EPA.

Sincerely,



Bob Wyatt

cc: Sean Sheldrake, U.S. Environmental Protection Agency, Region 10
Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Grand Ronde Community of Oregon
Confederated Tribes of Siletz Indians of Oregon
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of the Warm Springs Reservation of Oregon
Nez Perce Tribe
Oregon Department of Fish & Wildlife
United States Fish & Wildlife
Oregon Department of Environmental Quality
LWG Legal
LWG Repository

Unresolved LWG Comments on RI Section 5

August 29, 2014

1. Nature of Contamination Evaluation: EPA re-located the nature of contamination discussions from the main text in Section 5 to a new subsection in Appendix D. This information is fundamentally important to the RI (including development and refinement of the Conceptual Site Model [CSM]). The re-location also makes it very difficult for the reader to follow and understand this information. This information should remain in the main text of Section 5.
2. Indicator Contaminants in Surface Water: Return Section 5.4- Surface Water to a format more closely resembling the Draft Final RI surface water presentation. The EPA re-organizations, additions and deletions to this subsection make it a far less informative technical discussion of the surface water data set.
3. Indicator Contaminants in Biota: The same is true for Section 5.6- Biota. It should be returned to a format more closely resembling the Draft Final RI biota presentation. As with Section 5.4, the EPA re-organizations, additions and deletions to this Section 5.6 make it a far less informative technical discussion.

DO NOT QUOTE OR CITE

This document is currently under review by EPA and its federal, state, and tribal partners, and is subject to change in whole or in part.

Remedial Investigation - Section 5
Resolved Issues

Issue	EPA/LWG Resolution
Global Section 5 Concerns	
1. Consistency with other RI/FS reports: COC list must match BERA/BHHRA list.	a. EPA's Table 5.1-2 was edited to match BRAs. Resolved to clarify nomenclature used to refer to TCDD TEQ (same as dioxin/furan TEQ) and to remove monobutyltin as a "COC". b. Use of term COC, not allowed in RAs – Agreed to delete "COC" from Table 5.1.-2 headers and that the term will not be used in Section 5. Headers will read BERA and BHHRA Screen. The term COC is not used in the text.
2. EPA added source statements in Section 5 which we feel are more appropriate in Section 10 (CSM) along with the summaries of the physical system, upland sources, and loading information from other Sections the RI.	EPA agreed to clarification statements about "sources" throughout Section 5, e.g., modifying the word "source" to clarify that it is "sediment bed source," rather than an upland source.
3. Data Adequacy and Data Quality Statements. RI data set was validated and approved for use by EPA. EPA formally acknowledged adequacy of data set for R/FS at the end of Round 3.	EPA agreed to addition of qualifying statements and elimination of statements that can be interpreted as suggesting that data quality or the amount of data collected is not suitable for completing the RI.
4. Retain Sampling Effort Summaries: Brief summaries of the multi-year sampling approaches provide important context for the reader in Section 5.	EPA agreed to include some additional sampling program details in the data set subsections.
5. Retain project-specific "T", "A" and "V" descriptors in Tables, Maps and Figures. T – The result is mathematically derived, such a summed total. A – Total value is based on a limited number of analytes. V – Median or 95th percentile was obtained through interpolation of data. While not laboratory qualifiers, these are project-specific data descriptors have been used in the database and in numerous Portland Harbor RI technical documents, in addition to the Draft and Draft Final RI reports. Each provides important information about a reported value.	EPA agreed to retain A and T "qualifiers", as long as renamed as "descriptors". V will be deleted.
6. Do not use the term "Key" contaminants (e.g., substitute with "subset of indicator contaminants") for the contaminants presented in the Appendix. In the Draft Final RI, all chemicals presented were labeled indicator contaminants, and subset of the indicator contaminants were presented in the main text.	EPA agreed to remove the term "Key". The 14 contaminants discussed in the main text are called "Indicator Contaminants" and others are simply called "contaminants".

Issue	EPA/LWG Resolution
7. Technical Inaccuracies: There are many statements in EPA's revision that are technically inaccurate and will need to be revised. These include descriptions of the sampling programs, sample counts, fish compositing schemes, etc. We will need to redline EPA's redline and send back once the paths forward on global issues noted above are resolved.	The LWG conducted extensive QA checks on text and data products to correct inaccuracies.
Subsection Specific Issues	
<i>Section 5.2 Bedded Sediment</i>	
1. There is no callout for the revised Box-Whisker plots developed at EPA's request. We asked EPA if these are being presented in Section 5.	Box-whisker plots moved to Section 10.
<i>Section 5.3 Mobile Sediment</i>	
1. Borrow pit data set was not included. Section 5.0 states those data will be included in 5.3 as natural sediment traps. Integral proposed adding that material, formerly in Appendix H, into this subsection.	Borrow pit discussion will be included in Section 6 (Loading, Fate and Transport for Select Contaminants).
<i>Section 5.4 Surface Water</i>	
<p>1. WQC/MCL comparisons</p> <p>We requested clarification regarding the purpose of the MCL/WQ Criteria comparisons. In the Draft RI, comparison of SW and TZW data to human health criteria were presented in Appendix D3.3, as requested by EPA. This sort of evaluation is not performed with respect to other media (expressly not performed for sediments). Comparison to upriver surface water concentrations would be parallel to the approach used in other subsections. In addition, these comparisons are presented under the spatial distribution subheader which is no longer accurately named. The added text is often unclear about which AWQC for human health is being compared to and seems to be inconsistent in the criteria cited. Finally, some individual compound criteria (e.g., BaP) are inappropriately compared to summed totals.</p>	<p>SW data comparisons to Oregon standards and MCLs will be retained. EPA agreed to add the following footnote for the MCL comparisons:</p> <p>"Under Oregon State Administrative Rules, OAR 340-041-0340, Table 340A, the designated beneficial use of the lower Willamette River includes private and public domestic water supply after adequate pretreatment to meet drinking water standards. There are no known current or anticipated future uses of the lower Willamette River within Portland Harbor as a private or public domestic water supply. As such, their use in this section is solely as values for comparison."</p> <p>Also, EPA agreed to delete Appendix D3.3 in its entirety.</p>
<p>2. Source statements are numerous in the Section 5.4.</p> <p>For this medium in particular, such statements seem inappropriate and premature and should be reserved for Section 10 where the various elements on the RI are juxtaposed and discussed.</p>	See Global Item 1 above.
3. Histogram format that was previously agreed to not reflected in these EPA comments; we need confirm that is an oversight not a change in position.	EPA acknowledged this was an oversight not a change in position, so the previous agreement still holds.

Issue	EPA/LWG Resolution
<i>Section 5.5 TZW</i>	
1. Sample count discrepancies appear to be due to an inadvertent omission of certain sample codes in PA's SCRA extract. We can replicate the Appendix D4 counts.	EPA agreed to allow the LWG to correct these kinds of discrepancies during LWG generation of the electronic version, and EPA will verify the corrections at that time.
<i>Section 5.6 Biota</i>	
1. Numerous mis-statements about tissue composition scheme, sampling zones, and whole body vs fillet concentrations need to be corrected.	EPA agreed these are also editorial corrections that should be made without the need for further discussion.

Unresolved LWG Comments on RI Section 10

August 29, 2014

Section 10 of the LWG's August 29, 2011 Draft Final RI Report presented the LWG's conceptual site model for Portland Harbor. The LWG's CSM integrated information presented throughout the RI Report to portray the relationship among sources, chemicals, transport mechanisms and human and ecological receptors. See, Portland Harbor Consent Order SOW, §4.5.1. The LWG's draft of Section 10 thus contained a detailed discussion linking known and suspected sources of contamination to contaminant distribution identified during the RI and explaining the risks associated with areas of elevated contaminant concentrations. Although complex, a robust synthesis of physical, chemical, biological and human use information is a critical foundation for evaluating the risk reduction achievable through potential remedial alternatives.

"The purpose of the remedy selection process is to implement remedies that eliminate, reduce, or control risks to human health and the environment." 40 C.F.R. §300.430(a)(1). Accordingly, "the purpose of a remedial investigation (RI) is to collect data necessary to adequately characterize the site for the purpose of developing and evaluating effective remedial alternatives." 40 C.F.R. §300.430(d). EPA's 2005 sediment guidance stresses the importance of a robust conceptual site model to an adequate characterization of complex sediment sites such as Portland Harbor:

Especially important at sediment sites is the development of an accurate conceptual site model which identifies contaminant sources, transport mechanisms, exposure pathways, and receptors at various levels of the food chain.

Sediment Guidance, pp. i-ii.

For sediment sites, perhaps even more so than for other types of sites, the CSM can be an important element for evaluating risk and risk reduction approaches. *** Essential elements of a CSM generally include information about contaminant sources, transport pathways, exposure pathways, and receptors. Summarizing this information in one place usually helps in testing assumptions and identifying data gaps and areas of critical uncertainty for additional investigation. The site investigation is, in essence, a group of studies conducted to test the hypotheses forming the conceptual site model and turning qualitative descriptions into quantitative descriptions. The initial conceptual model should be modified to document additional source, pathway, and contaminant information that is collected throughout the site investigation. *** A good CSM can be a valuable tool in evaluating the potential effectiveness of remedial alternatives. As noted in the following section on risk assessment, the CSM should capture in one place the pathways remedial actions are designed to interdict to reduce exposure of human and ecological receptors to contaminants.

Sediment Guidance, §2.2.

EPA's revisions to RI Section 10 deleted most of the CSM developed by the LWG and EPA between 2001 and 2011,¹ including:

- Important details on the physical site setting and sediment transport and stability, which are necessary to evaluate the effectiveness of natural recovery and monitored natural recovery. These are standard components of a CSM. *See, Risk Management Principles Recommended for Contaminated Sediment Sites* (EPA 2002) (Principle 4: "Develop and refine a conceptual site model that considers sediment stability").
- Details about the locations of historical industrial facilities relevant to the understanding of sources for the CSM.
- Almost all details on receptors and exposure scenarios. Establishing the link between investigation data and the assessment of risk is a critical function of the CSM. *See, Standard Guide for Developing Conceptual Site Models for Contaminated Sites*, (ASTM 1995).
- Most discussion of historical pathways. The discussion of historical pathways is now out of balance with the current sources discussion, which focuses on pathways. This is a significant omission because the contribution from historical sources relative to current sources is important for identifying practical cleanup technologies in the FS.
- Most of the loading analysis, which is a critical CSM element considering the dynamic nature of this river system.
- Discussion of chemical signatures and nature, which inform an understanding of potential sources and fate and transport.
- Most discussion of external loading sources including atmospheric, groundwater, and stormwater.
- Discussion of uncertainties.

The CSM Conclusions Section is neither a coherent nor a comprehensive summary of either the key findings of the RI or the CSM, and there are many inconsistencies in the individual contaminant sections. For example, EPA deleted all text about upriver sources of PAHs, but included a new statement that "no upriver watershed sources of BEHP have been identified."

The attached mark up of EPA's redlined revisions to Section 10 identifies all specific text the LWG believes needs to be retained in RI Section 10 in order for the CSM to be adequate. In

¹ Consistent with the 2004 Programmatic Work Plan, the LWG has consistently refined and updated the CSM. EPA's comments on the 2009 draft RI included three general and 33 specific comments on the CSM, incorporation of which expanded the CSM from 73 to 125 pages in length. EPA's 2014 revisions delete 82 pages of analysis from the CSM, reducing it to a 43 page summary of selected topics covered by earlier RI sections.

the absence of EPA integrating this information into a site-specific CSM, the RI lacks an adequate linkage among known and suspected sources of contamination, contaminant distribution and unacceptable risk to support the feasibility study. As important, the lack of an integrated portrayal in a single location in the report of the relationships between sources, areas of elevated contaminant levels, and risks presented by those areas will be confusing to the general or casual reader of the RI, who will be unlikely to dig into the details of appendices for an understanding of the specific risks presented, if any, by picnicking or landing a kayak. As we understood it, one of EPA's main objectives in revising the RI was to make the document more accessible to the general or casual reader.

As we have previously communicated to EPA, Integral has advised the LWG that these issues constitute such significant technical errors that Integral is unwilling to stand behind the findings in the document. The LWG also will not identify itself as an author of EPA's current version of the report, because, taken as a whole, and especially in light of EPA's revisions to Section 10, the RI no longer reflects the LWG's understanding of how physical, biological, and chemical conditions in Portland Harbor interact with human activities and ecological receptors and does not provide a foundation for assessment of a reasonable set of cleanup alternatives in the FS. The LWG acknowledges and will comply with its obligation under the Consent Order, and we will instruct Integral to incorporate EPA's changes into the RI Report and produce a final report for EPA in the manner directed by EPA.

Cohen, Lori

From: Cohen, Lori
Sent: Tuesday, October 21, 2014 1:31 PM
To: Jim McKenna (jim.mckenna@verdantllc.com); Wyatt, Robert; Margaret Kirkpatrick (margaret.kirkpatrick@nwnatural.com); (jworonets@anchorqea.com)
Cc: Koch, Kristine; Sheldrake, Sean; Yamamoto, Deb; Gustavson, Karl; Muza, Richard
Subject: FW: Portland Harbor - depositional areas/ natural recovery

All –

Prior to our meeting on Thursday, we thought it might be helpful to respond to some of Jim's questions with regard to depositional areas as related to natural recovery areas at the Portland Harbor site. We embedded the answers to his specific questions in his email below and hope this is helpful to you. Please forward this message to others as appropriate.

Please note we have invited Karl Gustavson to call in for our meeting Thursday since the LWG has indicated an interest in discussing the CSM.

We look forward to speaking with you Thursday.

Thank you.
Lori Cohen

From: James McKenna [mailto:jim.mckenna@verdantllc.com]
Sent: Monday, October 06, 2014 12:10 PM
To: Cohen, Lori
Cc: Wyatt, Robert; Koch, Kristine; Margaret Kirkpatrick (margaret.kirkpatrick@nwnatural.com); Yamamoto, Deb; Muza, Richard; Jennifer Worenets (jworonets@anchorqea.com)
Subject: RE: Portland Harbor - natural recovery areas

Lori:

As a follow-up to your conversation with Margaret and Bob's voicemail to Kristine last week, we want to thank you for clarifying your comments regarding deposition rates in Portland Harbor. We also appreciated your comment at the conference, which is reiterated in your email, that EPA believes there are some natural recovery areas in the river. Natural recovery is an important mechanism and requires a strong understanding how the river system works (i.e., part of the RI), and influences alternatives development and assessment (i.e., the FS). However, we disagree with your comments that natural recovery is limited to a relatively small percentage of areas.

There are a few statements in your email that I want to respond to or seek further clarification from EPA. In your second paragraph you present some deposition rates based on CDM's work. You end the paragraph stating "I understand the LWG has all of the backup information used to prepare this chart." The LWG has the bathymetric data utilized by CDM, and we have one map from EPA showing areas consistent with the last two columns in EPA's table. However, we do not have a description of assumptions and factors that went into CDM's deposition calculations. It would be helpful in our understanding of CDM's deposition calculation to see EPA's backup information.

EPA Response: As provided to the LWG in a meeting on June 5, 2014, EPA defines depositional areas as >2.5 cm/year of deposition or a subsurface to surface core ratio of >2. The draft FS uses sedimentation rate of >1 cm/yr and a core ratio of >1.5 for determination of depositional areas based on the analysis and rationale presented in Section 6.2.2.1.1. Appendix La of the Draft FS (p. 37) states that the typical survey measurement

error range is 0.5 feet, resulting in an uncertainty range of 1 foot for bed elevation changes between two surveys. The uncertainty range in one direction (i.e., depositional) would be 6", which equates to roughly 1" (2.5 cm) per year for the period between the 5/2003 and 1/2009 surveys. Therefore, the depositional criterion EPA is using assesses deposition that can reliably be detected using the available survey data.

Also in your second paragraph you state *"The chart indicates that if you look only within the Sediment Decision Units (SDUs or areas where EPA expects to propose remedial action)..."* It has been our understanding that the areas of remedial action (active remedies) will be defined by the boundaries of the Remedial Action Levels (RALs) for each alternative, resulting in Sediment Management Areas (SMAs) for each alternative. This is consistent with both the 2012 Draft FS approach and EPA's presentations in FS technical meetings this year. SDUs are a concept developed by EPA after the 2012 Draft FS, and which EPA indicates may be used as a line of evidence to assess the effectiveness of alternatives in the revised FS. As such the LWG assumes areas of active remedy will still be defined by SMAs, not by SDUs.

EPA Response: The LWG is correct that active remedies (capping, dredging, EMNR, and in-situ treatment) will be defined by the boundaries of the remedial action levels for each alternative. MNR, which is also a remedial action, is expected to occur sufficiently at all areas outside the RAL boundaries, but within the boundary exceeding the PRGs. In the revisions to the FS, each alternative will be evaluated both within the SDU and throughout the site (note: this is not a site-wide average) to determine long-term effectiveness and permanence of the remedial alternative. This evaluation will be conducted in the detailed evaluation in the FS.

In your third paragraph you state the main difference between the LWG and EPA view of natural recovery is that the LWG includes neutral (stable) areas with depositional areas. Consistent with EPA's 2005 contaminated sediment remediation guidance, natural recovery is evaluated through multiple lines of evidence, not just evidence of deposition. Natural recovery not only includes physical isolation through the deposition of incoming sediments, but also other processes such as degradation/transformation, reducing bioavailability, and other physical processes such as dispersion. The draft FS uses a multiple lines of evidence approach to determine whether neutral areas based on bathymetry data are likely or unlikely to naturally recover.

EPA Response: Section 6 of the LWG's draft FS states natural recovery is the primary mechanism for deposition, and that other lines of evidence are also based on deposition processes. EPA believes that considering other lines of evidence is important as well, and this is consistent with common knowledge that persistent organic contaminants (e.g., PCBs, dioxins/furans, DDX and some PAHs) do not appreciably degrade in the environment, which is the main reason many of these contaminants still exist in the river sediments today even though they were released many decades ago.

It appears that for depositional areas the main difference in the LWG and EPA approach appears to be how "depositional area" is defined (i.e., at what rate of sediment accumulation does one consider an area depositional?). The rate of accumulation utilized by EPA to define "deposition" (2.5 cm/year or 15 cm over the 6 year period between 2003 and 2009) is about twice the rate utilized by the LWG (7.5 cm over the 6 year period). The LWG's rate is based on the known precision of the bathymetry survey equipment and data evaluation consistent with standard accepted methods (see 2012 Draft FS p. 6-11). It would be helpful to see EPA's backup for the 2.5 cm/year accumulation rate so that we can understand the rationale for its proposed use in the revised FS. There may also be other differences between EPA's and LWG's analyses of the bathymetry data, but we are not able to identify them without the backup information on EPA's analysis.

EPA Response: As provided to the LWG in a meeting on June 5, 2014, Appendix La of the LWG's Draft FS (p. 37) states that the typical survey measurement error range is 0.5 feet, resulting in an uncertainty range of 1 foot for bed elevation changes between two surveys. The uncertainty range in one direction (i.e. depositional) would be 6", which equates to roughly 1" (2.5 cm) per year for period between the 5/2003 and 1/2009

Surveys. Therefore, the depositional criterion assesses deposition that can reliably be detected using the available survey data.

Also in your third paragraph you state EPA established the depositional areas on bathymetry and not a model. The LWG also established depositional areas based on evaluation of the various bathymetric surveys. Although the draft FS sometimes discusses model information as well, the LWG's determination that 63% of the Site is depositional (see the first column in draft FS Table 2.1-1) is based strictly on the bathymetric surveys, not a model. This is also true for the LWG's assessment of neutral (stable) areas and areas exhibiting erosion.

The LWG is prepared to discuss the technical details of these matters with the EPA project team as part of the remaining RI and FS discussions. In the meantime, please contact me if you have any questions.

Thanks,

Jim McKenna
Verdant Solutions, LLC
5111 SE 41st Avenue
Portland, Oregon 97202
Office: (503) 477-5593
Cell: (503) 309-1621
jim.mckenna@verdantllc.com

From: Cohen, Lori [<mailto:Cohen.Lori@epa.gov>]
Sent: Friday, September 19, 2014 11:40 AM
To: Margaret Kirkpatrick (margaret.kirkpatrick@nwnatural.com)
Cc: James McKenna; Wyatt, Robert; Koch, Kristine; Yamamoto, Deb; Muza, Richard
Subject: Portland Harbor - natural recovery areas

Hi Margaret,

This is a note to follow up on the information I provided at last Friday's Environmental Law and Education Center conference relative to natural recovery at the Portland Harbor site. The information I provided was based on an initial discussion of deposition based on bathymetry in the Study Area and was an underestimate. I apologize for any confusion on this.

EPA believes there are some natural recovery areas in the river. CDM Smith conducted the analysis in the attachment based on 10'x10' pixels of bathymetric change, and shows that there are 39-47% depositional areas in the study area. The chart indicates that if you look only within the Sediment Decision Units (SDUs or areas where EPA expects to propose remedial action), the percentage drops to 32-40%. I understand the LWG has all of the backup information used to prepare this chart.

As EPA has shared with the LWG, the main difference between how EPA views natural recovery areas compared to the LWGs view as presented in its draft FS, is that the LWG includes areas of neutral deposition (transitional areas) as deposition and EPA does not. EPA includes areas considered to be depositional based on existing bathymetric data (not a model).

The project team will be reviewing and discussing this in more detail as part of the FS.

Lori

Cohen, Lori

From: Cohen, Lori
Sent: Thursday, January 16, 2014 2:19 PM
To: 'Kirkpatrick, Margaret'; Yamamoto, Deb
Cc: Dean Marriott (dean.marriott@portlandoregon.gov); (jack.isselmann@gbx.com) (jack.isselmann@gbx.com); Imeson, Tom; Doug Loutzenhiser (doug.loutzenhiser@total.com)
Subject: RE: December 10 meeting summary
Attachments: notes mgr meeting 12-10-13 rev lc.docx

Hi Margaret –

Thank you for drafting the Dec 10, 2013 meeting notes (per your January 3, 2013) email. Deb and I agree that your notes do a good job capturing our discussion; there are only a few edits and a question for you in the attached notes. In addition here is information that captures the requested EPA follow up to Items I, II and III.

Item I –

The September 24th, 2013 letter from Lori Cohen to Margaret Kirkpatrick regarding the process for finalization of the remedial investigation (RI) report for the Portland Harbor Superfund Site can be modified with the following language – to be inserted to p2 of the Sept 24 letter as a new second paragraph on that page:

The EPA and LWG staff will agree on a list of “parking lot” sections that will be reviewed and can become part of the final formal dispute process if noted on the “parking lot” list. This parking lot list will only include those issues where EPA notes a section will be taken out and revised to become part of a later section of the document; LWG can then review the later section to ensure the information is included as indicated by EPA. If the information is not included as had been indicated by EPA, the LWG can dispute this section either informally and /or formally per this letter.

Please let me know if this language captures resolution of the LWG concern. And if it does, we need to be sure our respective project teams see this language.

Item II

The LWG has raised several concerns about calculation of background levels in the RI. Deb and I have looked into this issues and here are our conclusions.

Early in the development of the RI, EPA allowed for the LWG to provide its approach to calculating background. EPA has retained the fundamental approach to background calculations which present the 95% Upper Confidence Level on the mean and the 95% Upper Predictive Limit for the contaminants of concern. As you note, the changes EPA is making at this time with regard to background are with regard to how the outliers are selected for these calculations. In the final RI, EPA is identifying which stations will be considered outliers and it appears from your notes that there is now technical agreement on this issue. What remains is the concern that “EPA changed its mind” with regard to how the outliers would be identified. The following provides more background on this issue and notes that in one instance, EPA determined that prior direction on this matter was not fully consistent with our guidance. Now that this has come to our attention, it is appropriate to adjust the dataset in accordance with EPA guidance.

Early on, the LWG proposed an approach to evaluating outliers that identified “primary” and “potential” outliers – while this approach is not described anywhere in EPA guidance, EPA agreed to review the approach. The LWG’s position was that outliers should only be removed from background if they were “primary” outliers per the LWG definition. Primary outliers were identified if the value was approximately an order of magnitude greater than the mean of the data set, or if the sample was collected proximal to a known or suspected source. EPA was clear in our comments that we did not agree with this approach (see EPA 2008 Comments #1 and #3). EPA indicated that further justification of some of the primary outliers was needed and that some of the potential

outliers should be reconsidered as well. There is no basis in the scientific literature for comparing the value of potential outliers to statistical values calculated on a data set that includes the potential outliers in question.

Further, in the 2008 and 2010 comments, we stated that if there were clusters of outliers, they should be removed. However, we also said that outliers that were geographically dispersed may be retained, but stated that statistical outliers should be used with caution. *Our prior conclusion that removing outliers based on clusters and distributed outliers was consistent with guidance is not true since EPA guidance does not discuss this approach.* EPA guidance clearly states that if data are due to sources, they should be removed; thus, removal of clusters would be consistent with guidance. However, guidance also states that if data are clearly distinct (or different) from the underlying dominant population, then they should be removed. In our final review of the data, the technical team looked not only at the scatter plots (geographic distributions), but at the Q-Q plots and the box-whisker plots. What is different from EPA's prior comments is that if the outlier is distinctly different from the greater population, then it is removed consistent with the definition that a defensible background data set should represent a single population. Consequently, EPA has changed its prior direction that statistical outliers that are distributed throughout the upriver reference area may be retained in the background data set because it is inconsistent with guidance.

Item III

EPA will draft an FS Process for LWG review after project manager discussions on the FS. This could be a topic for our next manager's meeting; Deb and I are looking at possible dates for a meeting in the first two weeks of February and will propose those dates to you soon. It may make sense to bring the technical project leads to our meeting as well.

Please let me know if you would like to discuss this any further.

Thank you,
Lori

From: Kirkpatrick, Margaret [mailto:margaret.kirkpatrick@nwnatural.com]

Sent: Friday, January 03, 2014 2:52 PM

To: Cohen, Lori; Yamamoto, Deb

Cc: Dean Marriott (dean.marriott@portlandoregon.gov); (jack.isselmann@gbx.com) (jack.isselmann@gbx.com); Imeson, Tom; Doug Loutzenhiser (doug.loutzenhiser@total.com); Kirkpatrick, Margaret

Subject: December 10 meeting summary

Lori and Deb,

It seems like a long time since we met in Seattle (because it was) but here, at last, is a draft meeting summary for your review. I'll blame it on the holidays—I got a draft out to my fellow senior managers on Dec. 20 and then didn't think about it again until yesterday.

I hope you both had lovely, restful holidays and I will look forward to your comments.

Margaret

Senior Managers' Meeting

December 10, 2013,

Region X Office, Seattle, WA

Present for EPA: Lori Cohen and Deb Yamamoto

Present for the LWG: Tom Imeson, Jack Isselman, Margaret Kirkpatrick and, by telephone, Dean Marriott and Jack-Doug Loutzenhiser

I. RI Process and Schedule

- The group discussed the latest schedule from the Region to the LWG, dated November 19, which shows completion of the RI in July, 2014, assuming no disputes or further delays.
- The LWG noted that: (1) the completion date in the original (November 2012) schedule was July, 2013, and (2) the section-by-section EPA revisions were going much more slowly than expected, due in part to the extent of EPA's reorganization and revisions.
- The LWG further noted its difficulty in finalizing sections of the RI where EPA has removed language the LWG thinks is important, but left open the possibility that the language will be restored in a future section. The LWG does not want to elevate or dispute the language removal if it will be included later but the agreed-upon process requires either elevation or loss of the opportunity to raise the issue. The LWG proposed two possible approaches:
 - For EPA to finalize all of the remaining RI sections, give them to the LWG together, and give the LWG a total of 30 days per section, to review and raise issues; or
 - For EPA and the LWG to put issues that may be resolved later into a temporary "parking lot." If issues in the parking lot are not resolved by the end of the section-by-section process, the LWG may elevate and dispute them then.
- EPA expressed a strong preference for the second approach based on its belief that the section-by-section review has resolved many issues along the way.
- RESOLUTION: LWG Senior Managers will discuss with others in the LWG and let EPA know whether the "parking lot" approach is acceptable. If so, EPA will either modify the September process letter or add an addendum.
- FOLLOW UP: The LWG Senior Managers did discuss the "parking lot" approach with others in the LWG. That approach is acceptable to the LWG as long as the LWG agrees to the modification to the September process letter or addendum.

II. Substantive RI Changes relative to background levels

- At its August 28 meeting and in subsequent telephone conversations with Lori Cohen, the LWG Senior Managers expressed concern that EPA is taking an approach to the calculation of background levels of contaminants that is different from the approach EPA directed the LWG to take in its 2008 comments on the RI, and that EPA confirmed as "consistent with guidance" in 2010. According to the 2008/2010 approach, the draft RI could include two background calculations for PCB concentrations, one preferred by the LWG ("the LWG Approach") and a second one, directed by EPA, that excluded certain "outlier" samples included in the LWG's preferred approach (the "Original EPA Approach"). Apart from the difference in the outliers included, the two approaches were identical. EPA has considered all of the information available at this time, including the information presented by the LWG to make its final decision on how to approach outliers. EPA is now proposing to discard both the "LWG Approach" and the "Original EPA Approach," and replace them with a new approach, leading to significantly lower background numbers (the "New EPA Approach"). The LWG advised EPA that it would elevate this issue if it could not be resolved at the PM level.
- ~~Between the August meeting and this meeting, EPA and the LWG reached a tentative agreement at the PM level that the RI would retain the LWG Approach but replace the Original EPA Approach with the New EPA Approach. EPA has determined the final approach to background that will be presented in the RI, and explained to the LWG as to how the outliers will be addressed in the RI.~~
- The LWG noted that this resolution is acceptable from a technical perspective but that an important policy issue remains: The LWG does not believe EPA should make significant substantive changes to the RI now, which depart from prior EPA direction or prior EPA/LWG resolution of issues, unless a subsequent change in law or agency Guidance dictates the change. The LWG further noted that EPA has not identified a change in law or Guidance to support its departure from the Original EPA Approach and that the LWG has not accepted the background-based PRGs EPA presented in September.
- RESOLUTION: EPA will investigate this matter further and report back to the LWG.

Comment [LCoh1]: This statement seems inconsistent with comment above that the background levels are acceptable from a technical perspective.

III. FS Process

- EPA proposed that the LWG and EPA take a collaborative and interactive approach to revising the FS. Unlike the RI process, EPA will not do section-by-section revisions shown as redlines and strikeouts to the LWG text. Instead, EPA will discuss its intended changes to particular sections of the FS with the LWG and then rewrite those sections. EPA noted that certain of its changes will be so fundamental that the redline/strikeout approach is impractical. EPA examples included the comparative analysis of alternatives and the elimination of site-wide averages.
- The LWG agreed that a collaborative, interactive approach is desirable but noted that Dan Opalski's decision in the BHHRA dispute is inconsistent with informal, back-and-

forth communications. According to the Opalski decision, every EPA comment is directive so the LWG must either dispute it within 14 days or comply with it.

- RESOLUTION: EPA will draft a proposed process for the FS, similar in some ways to the RI process but adapted to account for differences between the RI and FS. EPA and the LWG will work together to finalize the process.

IV. Overall Schedule

- EPA confirmed that it intends to complete both the RI and FS in 2014, and to produce a Proposed Plan in early 2015. EPA acknowledged that this is an ambitious schedule but noted that there will be more contractor support for the FS than there has been for the risk assessments and the RI.
- EPA said it will produce Region X's conceptual approach to a remedy in the late spring or early summer of 2014, and that EPA will make that document available to the LWG, the State of Oregon, and its partners (Tribes and Trustee agencies).
- EPA plans to take the conceptual approach to the Remedy Review Board and CSTAG, jointly, in the summer.
- The LWG will have an opportunity to provide written comments on the conceptual approach but will not be invited to the Remedy Review Board/CSTAG presentation. Oregon DEQ and EPA's partners will be invited to attend.
- EPA noted that this involves the Remedy Review Board and the CSTAG in the process much earlier than usual.
- EPA and the LWG noted that the conceptual approach document will be a public record and that even the limited distribution EPA has in mind creates the strong possibility that the conceptual approach will receive significant attention. EPA requested the LWG's assistance in framing public communication about this step in the process. EPA and the LWG discussed how they might work together to ensure appropriate communication about the conceptual approach and minimize polarizing stakeholder reaction.

V. EPA Decision Hierarchy

- The LWG asked for clarification of the EPA Project Managers' roles and relative authorities. The LWG said it had thought that Kristine was the lead on the BHHRA and the RI, that Chip was lead on the BERA and FS, that they were both at the same level and that they both reported up to Deb and then to Lori Cohen. Recently, however, Kristine has appeared to be the final authority on the contents of the BERA (because she provided the last set of comments and appeared to have the final say on the BERA's approach to risk management recommendations) as well as the BHHRA and the RI.
- EPA responded that Chip and Kristine are a "tag team" on the various documents; that Chip, Kristine and Sean Sheldrake are all PMs at the same level; and that none of them have the authority to override decisions made by the others. EPA confirmed that all three report to Deb, who reports to Lori.

- EPA said Kristine will be working on the FS with Chip, in part because of her technical expertise and in part because of Chip's eligibility for retirement.

VI. Delegation update

- EPA described the briefing Region X and Headquarters recently provided the Oregon Delegation's staff:
 - Jim Woolford will attend all Senior Executive/Region X meetings;
 - Headquarters staff will be involved in development of the remedy before the Remedy Review Board/CSTAG process;
 - Headquarters will review the Proposed Plan before it becomes public;
 - Headquarters will make additional resources available to the Region.

VII. Senior Executives Meeting

- EPA and the LWG discussed the agenda for the January 7 Senior Executives meeting, which will be attended by Jim Woolford, Dennis McLerran, Rick Albright and Lori Cohen. In very general terms, EPA proposed the following:
 - Welcome and Introductions
 - Purpose of the Executives Meeting: Not to resolve technical issues, but to discuss how to move the process forward to the selection of an implementable remedy
 - Schedule
 - Headquarters' and the Region's respective roles
 - Public outreach and education
 - Agreements and Next Steps
- EPA and the LWG discussed the merits of having one or two more Senior Executives' meetings before the production of EPA's conceptual approach

Cohen, Lori

From: Kirkpatrick, Margaret [margaret.kirkpatrick@nwnatural.com]
Sent: Monday, April 29, 2013 2:41 PM
To: Cohen, Lori
Subject: informal disputes

Hi Lori,

Here's the email I just promised with the LWG's questions and my thoughts about the current informal disputes on the RI. Questions first:

1. What's the process for elevating disputes?
2. Is the resolution process a face-to-face discussion, a teleconference, an exchange of written materials, or some combination?
3. Who sets the schedule and arranges meetings/teleconferences?
4. Who are the decision-makers?
5. How will decisions be communicated?
6. What must the LWG do to preserve its right to a formal dispute on the issue, if necessary?

The goal, I think, is to keep the informal process from looking and feeling like the formal dispute process. I am happy to discuss at any time but if we aren't able to connect with everything else that's going on, my biases fall in the direction of minimizing the amount of time spent on elaborate written materials and maximizing real-time exchanges of views, involving the right people. Maybe something like this:

- (1) a brief (as in short, not legal) written summary of the issues from the PMs,
- (2) a teleconference or meeting with the decision-makers that includes the individuals from both the LWG and EPA with the most expertise in the matter,
- (3) a written communication of the decision, and
- (4) if necessary, a written statement to the decision-makers that the LWG intends to dispute the issue at the end of the revision period if the issue is not otherwise resolved before that time.

I am told that the deadline for a two week resolution of these issues is May 10 so probably best to answer these as quickly as we can, or agree to an extension past May 10. Please let me know how you want to proceed.

Thanks,
Margaret

Cohen, Lori

From: Jennifer Woronets [jworonets@anchorqea.com]
Sent: Monday, April 29, 2013 9:11 AM
To: Cohen, Lori
Cc: Jennifer Woronets; Bob Wyatt; Margaret Kirpatrick; Dean Marriott (Dean.Marriott@portlandoregon.gov); Doug Loutzenhiser; (jack.isselmann@gbrx.com); Yamamoto, Deb; Koch, Kristine; Patty Dost
Subject: RE: LWG Letter Regarding RI Review Process

Lori,

The following email is provided on behalf of the LWG Senior Managers.

We wanted to provide a response to your email and letter of April 1 regarding the RI Review process. We were encouraged by Dennis McLerran's email on April 19 to Bill Wyatt which stated his objective that EPA and the LWG move together collaboratively toward finishing the Remedial Investigation and Feasibility Study. In that spirit, the LWG has discussed your letter internally and our Project Managers are now reaching out to have discussions with Kristine and Chip on the issues that need to be resolved. To give you a quick preview:

- Most importantly, we agree that, using a review process similar to what you describe, we can achieve the goal of producing a Final RI by March 2014.
- There are a few issues on the specific schedule that our Project Managers are discussing with Chip and Kristine. Although your letter assumed that the schedule was agreed to by the LWG Project Managers that is not correct. Less than half a day was provided to the LWG to provide feedback on EPA's proposed schedule; there simply was not enough time for the LWG Chair or any other LWG representative to review it let alone agree to this draft schedule, and EPA sent the revised working schedule to the LWG the next working day.
- We don't believe any big changes to your proposed RI schedule will be necessary, but we are discussing these issues:
 - We had previously agreed with EPA that the LWG would have 30 days to review each section. This proposed schedule cuts that short because, instead of providing for sequential review cycles for each of the sections, it requires the LWG to perform overlapping reviews. The LWG has not agreed to shorter review cycles and believes that 30 days per section is still necessary.
 - We are particularly concerned about the timing of the review of Section 10, which is the section that contains the Conceptual Site Model section and is technically complex. EPA's original schedule was to provide comments on this section on August 19, 2013; the new proposal is to provide comments on this October 1.
 - We note that the time line for generating the complete final Redline-Strikeout document (due December 26) is only 34 days and overlaps with both the November and December holiday periods.
 - We request that EPA give the LWG at least 7 days notice if it is not going to be able to meet a date by which it is providing a section for review. This is because the LWG needs to be able to reserve the time of its consultants for this work. The schedule you provided proposes giving only 3 days notice.
 - It was our understanding that this was to be a schedule that both the LWG and EPA would try to manage to, but that there would be some flexibility for both sides. However, the schedule states that EPA's dates are subject to change, but not the LWG's.

- We want to discuss an addition to your proposed process whereby EPA management provides assurances to the LWG that resolutions reached on each section supersede the original EPA comments on that section.
- Your letter tasks the LWG with “consistently applying” EPA’s suggested changes throughout the document. We understand this refers to words, phrases, abbreviations, etc. used throughout the document, and we should be able to do this. If EPA means something more than that, please let us know so that our project managers can discuss it.
- Your letter tasks the LWG with a “quality assurance review.” We understand that this means proofreading the document to verify that all specifically directed changes have been made and conducting an editorial review of the entire document once assembled to insure internal consistency and accuracy of items such as figure call outs, acronyms, citations, etc. If EPA means anything beyond that, please let us know so that our project managers can discuss it.

Just for your information, now that they have some experience with the enhanced informal dispute process, our project managers are also discussing with Chip and Kristine other ideas for increasing the efficiency of the process without adversely impacting the March 2014 target delivery date.

Thank you,
Jen Woronets
Anchor QEA, LLC
jworonets@anchorqea.com
421 SW Sixth Avenue, Suite 750
Portland, OR 97204
503-972-5014

Please consider the environment before printing this email.

The information is intended to be for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying, distribution or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by electronic mail at jworonets@anchorqea.com

From: Cohen, Lori [<mailto:Cohen.Lori@epa.gov>]
Sent: Monday, April 01, 2013 4:48 PM
To: Margaret Kirpatrick; (dean.marriott@portlandoregon.gov); (doug.loutzenhiser@total.com); (jack.isselmann@gbx.com)
Cc: Yamamoto, Deb; Koch, Kristine; Jennifer Woronets
Subject: LWG Letter Regarding RI Review Process

LWG Managers –

Attached you will find the letter of clarification from EPA regarding the Portland Harbor Remedial Investigation Review Process and Schedule. We started discussions on this process in November of last year. In practice, it seems to be going quite well although there was still interest in agreeing to the process in writing. Most recently, I received comments from the LWG via Margaret on 3/13/13 and I discussed those comments with her. I believe we have addressed the comments in the attached letter.

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Deb and I look forward to meeting with you on April 10, 2013. The meeting will be held in EPA's Oregon Operations Office from 9-11am. We can discuss this letter and schedule, if needed. As the meeting approaches, please share any other agenda topics that you have.

Thank you.

Lori



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

APR 01 2013

Ms. Margaret Kirkpatrick
NW Natural Gas Co.
220 NW 2nd Ave.
Portland, Oregon 97209

Dear Ms. Kirkpatrick:

I am responding to the Lower Willamette Group Senior Executive Team request that I submit a formal letter describing EPA's revision process for the second draft of the Portland Harbor Remedial Investigation Report. The EPA proposed a process on November 29, 2012 and it has been subsequently modified based on our discussions. The EPA's proposal is intended to facilitate more expeditious and efficient revision of the RI Report so that a final, approvable Report may be accomplished by Spring 2014. To date, I understand that the process is working well both from the LWG and EPA perspectives.

As a result of recent correspondence and discussion we have received on our proposal, we wish to clarify a couple important points. First, the review and comment process we propose does not require a formal modification of the AOC because it is consistent with the discretion the EPA has to comment on and/or modify deliverables provided in Section IX., Paragraph 1 of the AOC. The EPA has the discretion to perform a phased review and comment on a deliverable under the AOC. Likewise, a phased review and comment approach does not change the character or enforceability of EPA's modifications and comments on the second draft RI Report. This means that all of the EPA's modifications and comments on the second draft of the RI Report are required to be addressed by the LWG to the same extent and within the schedule as provided in Section VII., Paragraph 4.E of the AOC, unless another schedule is agreed to by all signatory parties.

The EPA's proposal provides the LWG with an enhanced informal dispute process for EPA's comments on the second draft RI Report. Although all parties need to agree to the changed process, the AOC provides the parties with the flexibility to agree to a change in the process. Likewise, our proposal provides for an extension of time for the LWG to raise formal dispute on EPA's modifications and comments on the RI Report, which also is explicitly allowed by the AOC and which extensions of have been regularly requested and agreed to throughout the implementation of the AOC since 2001.

The EPA's proposed process for the EPA modification and comment and LWG dispute resolution on the second draft RI Report is as follows:

For each chapter of the RI Report, the EPA will make modifications and if needed additional comments to the text and provide comments on figures, tables, and related Appendices needing revision by the LWG. The EPA will provide each chapter (maybe more than one at a time) to the LWG as it completes its review, modifications and comments; rather than hold all revisions until the EPA is done with the entire RI Report.

The EPA has provided a working schedule to the LWG (enclosed) that will be used by Project Managers to determine staffing and whether the project is keeping on track. The EPA Project Managers will notify

LWG Project Managers of schedule modifications 3 days in advance to ensure that parties are aware of changes to EPA's schedule for submitting revised chapters to the LWG, and the LWG schedule will be extended as well to provide a 30 day review and comment resolution period on each chapter of the RI. The RI schedule will be modified to accommodate the schedule changes previously described and to add time if necessary to account for informal issue resolution to the senior managers or formal dispute resolution, as described below. This working schedule was reviewed by and agreed to by the EPA and LWG project managers as of March 29, 2013, and targets a completion date for the RI as March 2014. Even with schedule modifications that may be needed, the EPA believes the RI can be completed in Spring 2014.

The LWG will have up to 30 days to review each chapter and identify any errors or other issues on EPA's modifications and comments and resolve both the LWG's issues and EPA's comments with the EPA through an enhanced informal dispute process. The review periods for each chapter may overlap as comments/modifications are submitted in close succession. Additional time for informal resolution of sections may be authorized by the EPA Project Managers if it is determined to be warranted based on the progress being made to resolve outstanding issues. Note that in accordance with the AOC, day means calendar day.

The EPA and LWG staff will meet once per chapter to discuss the LWG comments during the informal resolution period. If resolution of issues important to the LWG is not reached at the staff/project management level on each chapter, LWG can elevate those issues to senior management (both LWG and EPA) for resolution no later than, but preferably before the end of the 30-day review period. Senior management will have 14 days to attempt resolution. Resolution of disputed issues will be documented in writing by both the EPA and the LWG and the final redraft of the relevant RI chapter will incorporate the resolution consistent with the written resolution.

The EPA and LWG will agree that the process laid out above is an enhanced informal dispute resolution process to try to resolve issues quickly and not require formal dispute resolution per Section XVI of the AOC. The EPA and LWG will further agree that the time period to raise formal dispute to the ECL Office Director as provided in Section XVIII., Paragraph 1 will be extended until 14 days after all the EPA modifications and comments on all chapters of the RI Report have been provided to the LWG and the enhanced informal process has been conducted, if needed, on all chapters. The EPA and LWG agree that the 14 day period to raise a formal dispute will be triggered upon the EPA sending a letter with direction to incorporate all modifications and comments provided on the RI report, as modified by any changes agreed to between the Project Managers or informal dispute resolution agreements. The formal dispute resolution process on any remaining issues will follow the formal dispute resolution process in the AOC Section XVIII, Paragraph 1. The LWG and the EPA will further agree that no new issues may be raised in formal dispute that were not raised during the enhanced informal dispute process; the final LWG review will verify that all issues resolved on a section by section basis are reflected and are consistently applied throughout the document, and will include a quality assurance review of the document.

The due date for the LWG to provide a revised draft final RI Report will be 30 days after receipt of the EPA letter described above. Per Section XVIII, Paragraph 2, the LWG will proceed to incorporate and revise all sections and chapters of the RI Report that is not subject to formal dispute. It is the EPA's expectation that the LWG will be incorporating our modifications and working on addressing all of the EPA's comments as they receive them, particularly, changes to tables, figures and Appendices, so we do not expect there will be a need for an extension beyond the 30-day timeframe for a draft Final RI Report, which is expected to be delivered in electronic format only.

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At this time, the EPA is anticipating it will have to take four furlough days between April 22 and June 1. At least nine other furlough days may need to be taken by September 30. These furlough days may impact the RI schedule and the first four furlough days have been incorporated in to the attached schedule. The EPA project managers will be working with LWG project managers to identify anticipated dates so they have advance notice that comments on a chapter are going to be provided. If additional furlough days need to be taken, the EPA will notify the LWG and make further adjustments to the RI schedule.

I appreciate the Senior Executive Team's consideration of this proposal. I look forward to receiving written confirmation from the LWG that the process and extensions of time for informal and formal dispute on EPA's modifications and comments are acceptable to it.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Cohen", followed by a horizontal line.

Lori Cohen, Associate Director
Office of Environmental Cleanup

Enclosure

cc: Mr. Tom Imeson, Director
Port of Portland

Cohen, Lori

From: Cohen, Lori
Sent: Monday, April 01, 2013 4:48 PM
To: 'Kirkpatrick, Margaret'; (dean.marriott@portlandoregon.gov); (doug.loutzenhiser@total.com); (jack.isselmann@gbrx.com)
Cc: Yamamoto, Deb; Koch, Kristine; (jworonets@anchorqea.com)
Subject: LWG Letter Regarding RI Review Process
Attachments: 2013-03-29 EPA Portland Harbor RI Schedule.pdf; LWG Letter_Lori Cohen 4.1.13.pdf

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Thank you.
Lori



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL
CLEANUP

APR 01 2013

Ms. Margaret Kirkpatrick
NW Natural Gas Co.
220 NW 2nd Ave.
Portland, Oregon 97209

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I appreciate the Senior Executive Team's consideration of this proposal. I look forward to receiving written confirmation from the LWG that the process and extensions of time for informal and formal dispute on EPA's modifications and comments are acceptable to it.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lori Cohen", followed by a horizontal line.

Lori Cohen, Associate Director
Office of Environmental Cleanup

Enclosure

cc: Mr. Tom Imeson, Director
Port of Portland

Portland Harbor Project Schedule

Disclaimer: This schedule is a working schedule meant for Project Managers to keep project on schedule. Dates regarding duration of EPA review are informational only and the submittal dates to LWG are targets only and subject to change. EPA will provide 3 days notice to LWG with changes to the submittal dates to LWG, and the date for the LWG review will be adjusted as well. Per the AOC, LWG has 30 days to review comments submitted by EPA. Complete RI

Task	Subtask	Lead ¹	Duration (days)	Start	End	Submitted to LWG	LWG Review
Section 1	Introduction					11/30/2012	2/12/2013
	Edit text	Koch					
	Redline	Koch					
	Edit Maps	Koch					
Section 2	Study Area Investigation					11/30/2012	2/12/2013
	Edit text	Koch					
	Peer review	Keeley					
	Edit tables, maps, & Figures	Koch					
Appendix A	Data Sources and Site Characterization/Risk Assessment Database					11/30/2012	2/12/2013
	Review Text	Koch					
Appendix H	Merge w/Appendix A	Koch				11/30/2012	2/12/2013
Section 3	Environmental Setting					2/26/2013	4/11/2013
	Edit text	Cora/Koch					
	Edit tables, maps, & Figures	Koch					
Section 4	Identification of Sources					3/20/2013	4/19/2013
	Edit text	Cora/Koch					
	Edit tables, maps, & Figures	Koch					
Appendix C							
Section 5	Extent of Contamination					6/7/2013	7/8/2013
	Edit text	Koch					
	Edit tables, maps, & Figures	Koch					
Appendix D							
Section 6	Contaminant Fate & Transport					7/8/2013	8/7/2013
	Edit text	Koch					
	Edit tables, maps, & Figures	Koch					
Appendix E							
Section 7	Determination of Background					5/15/2013	6/14/2013
	Edit text	Koch/Allen					
	Edit tables, maps, & Figures						
Section 8	BHHRA					4/15/2013	5/15/2013
	Dispute	Allen/Koch/Cora					
	Edit text	Allen/Koch					
	Edit tables, maps, & Figures	Allen/Koch					
Appendix F	BHHRA	Allen/LWG					
Section 9	BERA					6/3/2013	7/3/2013
	Edit text	Shephard/Koch					
	Edit tables, maps, & Figures	Shephard/Koch					
Appendix G	BERA	LWG/Shephard					
Section 10	Summary & Conclusions					10/1/2013	10/31/2013
	Edit text	Koch/Cora					
	Edit tables, maps, & Figures	Koch/CDM					
Appendix I							
Section 11	References					10/1/2013	10/31/2013
	Edit text	Koch					
Executive Summary		LWG?	14	10/31/2013	11/14/2013		
EPA Review of Exec Summary		Koch/Cora	7	11/14/2013	11/21/2013		
EPA Letter Directing incorporation of comments		Koch	1	11/22/2013	11/22/2013		
Dispute Clock		LWG	14	11/22/2013	12/6/2013		
Integral Finalize Document (Electronic Version)		LWG/Integral	25	11/22/2013	12/17/2013		
Final LWG Approval		LWG	9	12/17/2013	12/26/2013		
EPA Review			30	12/26/2013	1/25/2014		
LWG Finalize (Full Production Version)		LWG/Integral	30	1/25/2014	2/24/2014		

Note 1: Additional appropriate technical and legal reviewers may also review various chapters.

Yellow highlighted cells indicates an actual date while unhighlighted cells indicate projected dates.

Cohen, Lori

From: Kirkpatrick, Margaret [margaret.kirkpatrick@nwnatural.com]
Sent: Monday, April 08, 2013 4:18 PM
To: Cohen, Lori
Cc: Yamamoto, Deb; Jennifer Woronets (jworonets@anchorqea.com)
Subject: RE: LWG Letter Regarding RI Review Process

Hi Lori,

Thank you for sending the clarification letter and revised schedule last week.

The LWG Senior Managers met this morning to discuss the materials and the agenda for our meeting on Wednesday.

On their behalf, I suggest that we discuss the following:

1. Progress to date
2. RI Schedule and Resources
3. FS Schedule and Resources
4. Stipulated Penalties associated with the BHHRA
5. Upcoming Activities
 - a. Meeting with elected officials
 - b. 2012 smallmouth bass tissue sampling meeting
6. Other

Please let me know if this looks about right, suggested changes, etc. I will also be in the office all day tomorrow if there's anything you want to discuss in advance.

I'll look forward to seeing you on Wednesday.

Thanks,

Margaret

PS Tom Imeson needs to participate by telephone. I will have his number and understand that we will be able to dial him in but if we need to make any other arrangements, please let me know.

From: Cohen, Lori [mailto:Cohen.Lori@epa.gov]
Sent: Monday, April 01, 2013 4:48 PM
To: Kirkpatrick, Margaret; (dean.marriott@portlandoregon.gov); (doug.loutzenhiser@total.com); (jack.isselmann@gbx.com)
Cc: Yamamoto, Deb; Koch, Kristine; (jworonets@anchorqea.com)
Subject: LWG Letter Regarding RI Review Process

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Thank you.
Lori



RE: Portland Harbor meeting - per our discussion
Kirkpatrick, Margaret to: Lori Cohen
Cc: Deb Yamamoto

11/06/2012 02:49 PM

History: This message has been replied to.

Hi Lori,

This looks good and I will get it out to the LWG this afternoon.

If the meeting lands on either the morning of the 27th or the 28th, I am sure I could find a conference room here. I can't obligate the Port, of course, but they have some good conference rooms both at the airport and in the Port offices adjacent to the airport, which might be convenient if you and Deb are flying in. Please let me know if you want me to secure space either place.

Thanks,

Margaret

From: Cohen.Lori@epamail.epa.gov [mailto:Cohen.Lori@epamail.epa.gov]

Sent: Tuesday, November 06, 2012 1:30 PM

To: Kirkpatrick, Margaret

Cc: Yamamoto.Deb@epamail.epa.gov

Subject: Portland Harbor meeting - per our discussion

To the Lower Willamette Group:

On October 25, 2012, a number of us attended a discussion hosted by Congressman Blumenauer with regard to the Portland Harbor Superfund Site. I heard a number of messages - one important message regarding the need for improved communications on the project and another important message regarding the interest in moving from studies to cleanup.

As follow up to that discussion, I would like to invite the key leadership of the Lower Willamette Group to a meeting with Deb Yamamoto and myself to discuss how we move forward on this project to improve communications and move from the study phase to cleanup in a timely manner. This will also be an opportunity to get to know you as I transition to my new role in oversight of the Portland Harbor Superfund Project (since Dan Opalski has moved on to his new position as the Director of the EPA Region 10 Office of Water). Deb is the first line supervisor of EPA on the project and has a key management role as well.

We are targeting a two hour meeting in Portland the afternoon of Nov 27, 28, or 29, and I hope you will be able to attend. Margaret Kirkpatrick has agreed to work with the group and determine the best date and time for the meeting. Our EPA conference room at our Oregon Operations Office is available the afternoon of Nov 27 and Nov 29; we will have to find an alternate location if Nov 28 turns out to be the best date.

My proposed agenda for the meeting is as follows:

Introductions (10 min)

EPA's perspectives of how the project is going/expectations/concerns (10 min)

LWG's perspectives of how the project is going/expectations/concerns (10 min)

Discuss an improved structure for staff and management meetings, as well as Congressional updates at key

milestones (30 min)

Discuss status and plans for finalizing the four outstanding documents (30 min)

I hope this is the first in a series of productive discussions. Thank you, and please let me know if you have any questions.

Lori Cohen, Associate Director
Office of Environmental Cleanup
U.S. EPA Region 10
ph: 206-553-6523



meeting with LWG senior managers
Kirkpatrick, Margaret to: Lori Cohen

11/12/2012 01:37 PM

History:

This message has been forwarded.

Hi Lori,

Thank you for contacting me about meeting with LWG senior managers to discuss ways to improve future communications between the LWG and staff at Region X. I have checked the dates you provided with others from the LWG and it looks like the afternoon of November 29 will work best. The following LWG senior managers are planning to participate:

Margaret Kirkpatrick – NW Natural

Dean Marriott – City of Portland

Drew Gilpin – Evraz/*Oregon Steel Mills*

Tom Imeson – Port of Portland

David Harvey – Gunderson

Doug Loutzenhiser – LSS

We have also reviewed and agree with the proposed agenda you provided.

I believe you indicated that EPA's Oregon Operations Office conference room is available on the afternoon of the 29th. If so, please let us know what time would work best for you and Deb and we will show up. If that conference room is no longer available, I can find space for the meeting here at NW Natural.

Thank you,

Margaret